

Running Head: DIVERSIFYING HEALTH EDUCATION

DIVERSIFYING THE HEALTH EDUCATION WORKFORCE
THROUGH THE RECRUITMENT OF UNDER REPRESENTED MINORITIES

Amber L. Shewalter

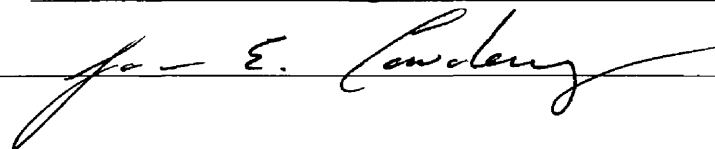
Presented to the Health Education Faculty
at the University of Michigan Flint
in partial fulfillment of the requirements for the
Master of Science in Health Education

March 21, 2007

First Reader

A handwritten signature in cursive script that reads "Shan Parker".

Second Reader

A handwritten signature in cursive script that reads "J. E. Cowley".

Dedicated to my mom, Leisa Marie Shewalter,
whose example of intelligence, courage, and humor
has helped me discover those qualities in myself.

TABLE OF CONTENTS

Glossary	3
Abstract	4
Chapter I: Introduction	6
Chapter II: Review of Literature	11
Chapter III: Methodology and Design	24
Chapter IV: Results.....	27
Chapter V: Discussion and Conclusion.....	33
References.....	39
Appendices.....	43

Definitions

Health Disparity: differences in the quality of health care received by a certain group of people; differences in the incidence, prevalence, mortality, diagnosis, and treatment of health conditions for a certain group of people.

Health Professions: all careers in healing, including the Allied Health Professions.

Minority, Underrepresented minority (URM): used here to mean a group consisting of African American/Black, Hispanic/Latino, and Native American/Alaskan Native.

Abstract

Healthcare disparities in the U.S. result in poor health outcomes for a growing number of ethnic minorities, and it is clear that proactive strategies are required of the Public Health community, including the field of health education. According to the Institute of Medicine, diversifying the healthcare workforce is essential to the elimination of health disparities. In a 2001 report, the Institute of Medicine recommends diversifying the healthcare workforce through “the development of intervention programs that emphasize more systematic, integrated strategies to ensure a continuous flow of minority students qualified to choose careers in the health professions” (Institute of Medicine, 2001). The need to diversify the health professions is evidenced by a nationwide shortage of underrepresented minorities (URM, a group composed of Hispanics, African Americans, and Native Americans) working in the fields of medicine and allied health or enrolled in related post-secondary programs (Lewin & Rice, 1994, Mitchell, 2005).

A health education recruitment workshop was designed to be used as a tool for raising awareness about the field of health education and actively recruiting minority students into college-level health education programs. The workshop utilized methods of social marketing and the social cognitive theory to motivate students to pursue a degree in health education by addressing benefits and barriers, behavioral capability, and modeling. The objectives of the presentation were to inform students of aspects of health education including roles and responsibilities, educational requirements, employment outlook, how health education benefits the community, and the significance of diversity in the healthcare workforce. The workshop was implemented on Saturday, November 18, 2006 at the University of Michigan. Nine 11th grade

students participated in the workshop. Pre and post test results indicated that the objectives of the workshop were met. It is recommended that health educators take active steps in recruiting diverse students into the field of health education by implementing similar workshops.

Chapter I Introduction

The issue of unequal healthcare for minorities in the U.S. has been well documented (Blind to Bias, 2003, Kirn, 2002, Institute of Medicine, 2001, NCHS, 2002). This is a widespread and complex problem that has no single cause; rather, it is the product of multiple barriers that exist in the context of a society that still struggles with institutionalized racism, social and economic inequality, prejudice, and racial and ethnic discrimination. Because health disparities are created and sustained by multiple sources, they must be fought via multiple tactics. In 2001, the Institute of Medicine released a report identifying and evaluating differences in healthcare received by racial and ethnic minorities and non-minorities in the United States. This report, produced by request of the U.S. Congress, also offered recommendations for interventions to eliminate these healthcare disparities (Smedley, Stith, & Nelson, 2002). The Institute's main finding was that healthcare disparities exist for racial and ethnic minorities in the U.S., that these disparities lead to negative health outcomes, and that it is in the best interest of the nation to eliminate these disparities. Among the Institute of Medicine's recommendations was to "increase the proportion of underrepresented U.S. racial and ethnic minorities among health professionals," and to "increase awareness of racial and ethnic disparities in healthcare among the general public," and among healthcare providers (Institute of Medicine, 2001).

One way in which the federal government is working to disseminate information about health disparities and eliminate disparate conditions is through Healthy People 2010, a national health initiative designed to improve the quality of life of all U.S. citizens and eliminate health disparities by the year 2010. This is a major federally supported undertaking which aims to improve the health of Americans through improving everything from environmental quality to nutrition to health care access. Healthy People 2010 identifies 467 objectives by which to measure the nation's progress toward achieving the goal of improved health for all citizens. Many of these objectives are further broken down into sub objectives which provide specific steps or measurements. Health education is integral to this effort, playing a role in 75 Healthy People 2010 objectives and sub objectives (U.S. Department of Health and Human Services, 2000).

Similarly, the field of Health Education has been identified as essential to public health by both the Public Health Faculty/Agency Forum, a 1991 report on the state of public health education, and the Public Health Functions Steering Committee (Allegrante, Moon, Auld, & Gebbie, 2001). In response to this need, the demand for health educators is growing, and more workers are entering the field. The Certified Health Education Specialist (CHES) certification was started in 1989, and by 2001, 6,000 health educators had earned this certification (Allegrante, Moon, Auld, & Gebbie, 2001). The Michigan Department of Labor and Economic Growth (2002) projects an increased demand for Health Educators in Michigan, with an 8.7% growth projected over the next 6 years. However, a mere increase in the number students who elect health education as a career choice will not be enough to meet the public health demand.

As the current state of the Allied Health Professions in the U.S. demonstrates, there is also a compelling need to increase the diversity of the pool of students seeking degrees in the

health professions. There is a nationwide shortage of underrepresented minorities (URM, a group composed of Hispanics, African Americans, and Native Americans) in the health professions in the U.S. (Baldwin, Woods, & Simmons, 2005, Sullivan Commission, 2004). According to the Institute of Medicine, increasing the diversity of the healthcare workforce is essential to the health of the nation. One reason for this is that ethnic minorities are statistically more likely than their non-minority colleagues to practice in medically under-served communities (Lewin & Rice, 1994, Smedley, Stith, & Nelson, 2002). Over 25 million Americans live in medically under-served communities, areas which lack access to even basic medical care. The majority of those living in medically under-served areas are ethnic minorities (Mitchell, 2005). In addition, studies have found that patients are more likely to comply with a treatment plan and report higher levels of satisfaction if they are being treated by a health care provider of the same ethnicity as themselves (Smedley, Stith, & Nelson, 2002). In short, increasing the diversity of the healthcare workforce will improve the health of U.S. citizens.

In 1994, the Institute of Medicine Committee on Increasing Minority Participation in the Health Professions released a comprehensive report in order to guide the nation's educational and medical institutions toward a more diverse medical workforce. A major finding of the report was that the number of ethnic minorities who enter college-level health professions programs is low when compared to their non-minority counterparts. This finding has been supported nationwide in examinations of data for programs in nursing, dentistry, and medical schools, among other health professions (Lewin & Rice, 1994, Mitchell, 2005). While this is a nationwide phenomenon, its effect can also be found at the University of Michigan Flint (U of M Flint). Although the University is located in a city in which over half of residents are underrepresented minorities, URM represent only 14% of the student body (Genesee County

Health Department, 2005, National Center for Education Statistics, 2006). From 2000 to 2005, URM have made up only 11.8% of graduates of the Bachelor of Science and Master of Science programs in Health Education at U of M Flint (NCES, 2006).

In order to increase the numbers of minorities who attend and graduate from health professions programs, the Institute of Medicine called for “the development of intervention programs that emphasize more systematic, integrated strategies to ensure a continuous flow of minority students qualified to choose careers in the health professions” (Lewin & Rice, 1994). A number of such programs have been created, which reach out to minority students to prepare them for a career in the health field by providing interested students with the academic, financial, and social support they need to gain admission to and graduate from health related academic programs (Baldwin, Woods, & Simmons, 2005). One of these programs is the Health Careers Opportunity Program, a workforce diversity program funded by the U.S. Department of Health and Human Services. There are over 80 Health Career Opportunity Programs nationwide, which provide health fairs and information sessions for local secondary-school students, along with services like tutoring, mentoring, and remedial classes in science and math (HRSA, 2006).

The University of Michigan – Flint sponsors the Flint Health Careers Opportunity Program (FHCOP). This program has four major components: Saturday Morning Academy, Health Professions Club, tutoring services for middle and high school students, and academic enrichment summer programs for middle and high school students. The Saturday Morning Academy is an eight-week academic program provided to enrich math, science, and standardized test-taking skills of eleventh and twelfth graders from Flint Community Schools. The Academy also offers students opportunities to engage in hands-on job shadowing at local hospitals to learn about various health professions.

Background from the 2005-2006 FHCOP Saturday Morning Academy revealed that the class was made up of 36 students, 32 of whom were URM. Surveys administered during the course of the Academy revealed that few students were aware of the field of health education. The proposed health education workshop is designed to be implemented as part of Saturday Morning Academy. The purpose of the workshop is to educate ethnic minority high school students about the disparities in health treatment and status across ethnicities in the U.S., and to introduce the students to health education as a career choice in order to encourage minority students to pursue careers in health education. This intervention is intended to reduce health disparities in the United States by increasing the diversity of the health workforce. A more diverse health workforce will improve the health of ethnic minorities by providing them with more culturally competent care from people with backgrounds similar to their own. The Saturday Morning Academy is an ideal setting for the workshop, because the students fit the target audience. Most are URM, and are attending Saturday Morning Academy to prepare themselves for college.

This workshop has been designed as a social marketing campaign, meaning it is a program designed to “increase the acceptability of a social idea or practice in a target group” (Maibach & Parrott, 1995). In this case, the target group is minority high school students who are considering attending college, and the target behavior is entering a college-level health education program. Social marketing campaigns focus on “selling” the target behavior by clearly explaining the benefits and costs. Obtaining a degree in health education requires hard work, but the potential benefits are a rewarding career and an opportunity to help reduce health disparities in the community.

Chapter II Literature Review

Ethnic Disparities in Healthcare

In 2001, The U.S. Congress asked the Institute of Medicine to investigate the evidence of growing health disparities and differences in mortality among American minorities. After an extensive investigation which took into account the experiences and reports of leading healthcare providers, experts, and academics, the Institute of Medicine compiled an in-depth study on racial and ethnic disparities in the U.S. The report, entitled *Crossing the Quality Chasm* states its primary finding as, “racial and ethnic disparities in healthcare exist, and because they are associated with worse outcomes in many cases, are unacceptable” (Institute of Medicine, 2001, Smedley, Stith, & Nelson, 2002). Racial and ethnic disparities in healthcare are not limited to one type of service, illness, or geographic area. And while some disparities are linked to socioeconomic status, studies have revealed that minorities receive inferior healthcare even when compared with non-minorities in the same socio-economic class, and with the same health insurance coverage (Smedley, Stith & Nelson, 2002). In other words, the evidence points to race and ethnicity as the sole reason many individuals receive inadequate healthcare.

One area in which dramatic disparities have been found is cardiovascular care. In 2000, the rate of death from heart disease was 29% higher among African Americans than White Americans in the U.S. (NCHS, 2002). Compelling evidence suggests that the higher rate of death is a result of poor cardiac health care (Ayanian, Udvarhelyi, Gatsonis, Pashos, & Epstein, 1993, Carlisle, Leake, & Shapiro, 1995) . A 1993 study on differences in receiving coronary revascularization following angiography compared African American and White patients of the same age, gender, and diagnosis, with the same Medicaid eligibility, living in similar regions. The study found that White patients were 78% more likely to receive revascularization than

African American patients. These results were observed in a variety of hospitals, including public, private, urban, and suburban facilities (Ayanian, et al., 1993). In a similar study, Carlisle, Leake, & Shapiro (1995) looked at rates of revascularization procedures among White, African American, Hispanic, and Asian American patients, controlling for primary diagnosis, age, gender, insurance, and socioeconomic status. The study found that African Americans and Hispanics were less likely than Whites to receive coronary angiography or angioplasty; however, there was no difference in the rates between Asian and White patients.

Diseases like cancer, diabetes, and HIV/AIDS also affect African Americans, Native Americans, and Hispanic Americans at a disproportionate rate when compared to their White counterparts. African American women are more than twice as likely to die from cervical cancer than White women. The rate of diabetes for Native Americans, African Americans, and Hispanics was all about twice that of Whites in 2000. And although Hispanics and African Americans accounted for only 26% of the total U.S. population in 2001, the two groups accounted for 66% of adult AIDS cases (NCHS, 2002).

These high mortality rates are tied to disparities in preventative care, which affect minorities from birth until death (Johnson & Smith, 2002, GCHD, 2005). Sixty percent of White seniors receive annual influenza vaccines, compared to 44% of Hispanic and 36% of African American seniors (Johnson & Smith, 2002). In 2001, 54% of White Medicare Integrated Care Members received follow up psychiatric exams for mental illness compared to 33% of black patients. Among female Medicare Integrated Care Members, 70% of White patients received breast cancer screenings compared to 62% of black patients (Blind to Bias, 2003). In fact, Gaskin and Hoffman (2000) found that African American and Hispanic individuals are more

likely to be hospitalized for preventable conditions than White Americans of the same socioeconomic status with the same insurance coverage and access to care.

In Genesee County, healthcare disparities exist in stroke, diabetes, heart, and kidney disease. Sixty two percent more African Americans than Whites died of Diabetes Mellitus in Genesee County in 2003; 49% more died of stroke and kidney disease, and 23% more died of heart disease (GCHD, 2005). Both Genesee County and the State of Michigan are experiencing pronounced health disparities in infant mortality, with African American infants dying at a much higher rate in both the state and county (GCHD, 2005).

Minorities in the Health Professions

One of the recommendations made by the Institute of Medicine (2001) is to combat health disparities by increasing the proportion of minority health professionals. This need is evidenced by the low representation of URM in the present day health workforce. Current data show that minorities make up a growing proportion of the U.S. population, but they are grossly underrepresented in the health field. While URM comprise 25% of the U.S. population, they account for only 10% of all health professionals. Seventy two percent of the U.S. population is White; however, 87% of U.S. registered nurses are White. Meanwhile African Americans and Hispanics are underrepresented in the nursing field, accounting for only 4.7% and 2% of registered nurses, respectively (HRSA, 2002). The Sullivan Commission (2003) found that URM make up only 6% of physicians and 5% of dentists nationwide.

Cohen, Gabriel, and Terrell (2002) point out several reasons which support the Institute of Medicine's recommendation of increasing URM health professionals. The first is that increasing the diversity of health professionals will create a more culturally competent workforce, and in turn, improve the health of patients. Indeed, cultural competence has been

found to improve patient outcomes in multiple studies (Neimeyer, 2004, Schim, Doorenbos, & Nagest, 2005). Given the growing diversity of the U.S. population, healthcare providers find themselves serving an increasingly heterogeneous patient base. Minority populations are growing at a quicker rate than white populations, and demographic trends predict that minorities will constitute 50% of the U.S. workforce by 2050 (Bessent, 1997, Smedley, Stith, & Nelson, 2001). In order to give the highest quality and most effective care to a patient, health professionals must have a “firm understanding of how and why different belief systems, cultural biases, ethnic origins, family structures... influence the manner in which people experience illness, adhere to medical advice, and respond to treatment” (Cohen, Gabriel, & Terrell, 2002). Studies have reinforced the need for culturally competent healthcare providers in order to reduce health disparities. A study by Majumdar, et al. regarding cultural sensitivity training revealed that cultural awareness- including awareness about one’s own culture- can affect patient health outcomes (Majumdar, Browne, Roberts, Carpio 2005). Cultural competence is a broad term defined many different ways, but the consensus is that cultural competence includes an understanding and appreciation of the cultures of diverse populations. Several authors have stressed that the essence of cultural competence in the health field is the ability to give high quality care to patients with diverse backgrounds (Eshleman 2006, Barrera 2002, Schim, et. al. 2005). High quality care is the goal, but the literature shows that meeting this goal requires both the learning of new skills and ideas, and in some cases, the rejection of long-held misconceptions. Lewin and Rice (1994) point out that working with colleagues of diverse backgrounds can help health care providers to better understand differing cultures and points of view. Thus, one way to improve providers’ culture competency is to create a scenario in which health care professionals work side by side with colleagues of various ethnicities. Increasing the

diversity of the workforce will also make available a diverse pool of providers so that patients have access to providers of varying ethnic backgrounds, and are therefore more likely to be treated by someone who looks like them, shares their values and beliefs, and speaks their native language.

A second motivation for increasing the diversity of the health workforce is to improve medical access for medically underserved populations. Even after controlling for income, Hispanics and African Americans have been found to be less likely to have a regular physician than White Americans. Minorities compose a disproportionate number of those residing in areas designated medically underserved by the Health Resource Services Administration (HRSA) (Cohen, Gabriel, & Terrell, 2002, Kington, Tisnado, & Carlisle, 2001). In fact, a California study revealed that the physician supply in any given area of the state is inversely related to the concentration of Hispanic and African American residents (Komaromy, Grumbach, Drake, Vranizan, Lurie, Keane, & Bindman, 1996). A growing body of research suggests that one way to address this is to train more URM in the health professions. Studies have found that minorities are almost twice as likely to practice in medically underserved areas than their White counterparts, and minority physicians treat a greater proportion of patients on Medicaid than do White physicians (Cohen, Gabriel, & Terrell, 2002, Kington, Tisnado, & Carlisle, 2001). Therefore, increasing the numbers of minority health care professionals could potentially improve access to health care for millions of Americans.

Increasing the diversity of health care providers can also improve patient satisfaction levels. Decades of overt racism and abuse have led to feelings of mistrust and skepticism toward the medical profession among many African American, Hispanic, and Native American individuals. This mistrust often impedes the formation of a productive patient-provider

relationship, which in turn may result in negative health outcomes. It has been hypothesized that a patient who does not trust his or her provider is less likely to adhere to treatment plans and schedule follow-up exams (Kington, Tisnado, & Carlisle, 2001). A study of minority patient satisfaction levels found that African American and Hispanic patients preferred to see a physician of the same ethnicity as their own because of the ability of the physician to speak their language and because of personal preference. Patients with racially concordant physicians were more likely to report that they received the medical care they needed, including preventative care (Saha, Komaromy, Koepsell, & Bindman, 1999).

In order for URM to enter the health professions, minority individuals must first successfully complete the necessary training programs. Enrollment figures for health professions schools demonstrate that more needs to be done to recruit and support URM students. A 2000 study collected data from 8 national health professions schools organizations, including the American Association of Colleges of Nursing, American Association of Colleges of Pharmacy, American Dental Education Association, and the Association of Schools of Public Health. These data showed the proportion of URM enrolled in health professions programs was smaller than the proportion of URM in the U.S. population. Programs in allopathic and osteopathic medicine have seen decreases in URM since the late 1990's. The number of URM graduating from dentistry schools fell 23% between 1998 and 1999. Schools of Nursing, Pharmacy, and Public health have seen modest increases in URM graduates; however, these figures still fall short of the proportion of URM in the overall U.S. population (Grumbach, Coffman, Rosenoff, & Muñoz, 2001). URM are less likely to complete four-year college degrees than White and Asian students. More than half of Hispanic and Native American college students were attending two-

year institutions in 1996, compared to 36.8% of White students. While URM compose about 25% of the nation's population, they account for only 14% of B.A.s conferred (Gándara, 2001).

Health Education

Although it is important to increase minority representation in every health profession, health education is among the most vital and important fields, as it has the potential to improve lives and prevent illness through prevention and advocacy. When the Institute of Medicine was charged with recommending strategies to eliminate healthcare disparities in the U.S., one recommendation was to “implement patient education programs to increase patients’ knowledge of how to best access care and participate in treatment decisions” (Smedley, Stith, & Nelson, 2002). Every day, health educators reach out to individuals to encourage healthy behavior and provide the skills and knowledge the public needs to protect themselves. Health educators address such issues as AIDS, family planning, obesity, tobacco, alcohol, and drug use, and a host of chronic diseases (Society for Public Health Education, 2005). Health education has also been lauded as an essential public health service by multiple professional and governmental agencies, including The Pew Health Professions Commission, the Public Health Functions Steering Committee, the United Nations, and the Institute of Medicine. The nationwide initiative Healthy People 2010 incorporates health education in 75 objectives and sub objectives, demonstrating how vital health educators are to the health of the nation. United Nations Ambassadors have rated health as the top priority worldwide (Allegrante, Moon, Auld, & Gebbie, 2001, Kilment & Turner, 2006). This growing emphasis on health will result in an increased demand for public health workers of all kinds, including health educators.

Health education has been found to be an effective tool in improving the health of minority populations. A recent study found health education to be more effective than nicotine gum in encouraging African American light smokers to quit. In the study, 755 African American smokers were divided into four groups and given nicotine gum or a placebo, and health education or motivational counseling. The quit rate for those receiving health education was 16.7% versus 14.2% for participants using the nicotine gum and 8.5% for those receiving motivational counseling (Tobacco Use, 2006). Health education was also found to be effective in a National Cancer Institute study of Native American women in North Carolina. In this study, 263 Cherokee women were randomly assigned to receive a cervical cancer education program designed to increase screening for cervical cancer, and 277 women were assigned to a control group. The study found that “women who received the education program exhibited a greater knowledge about cervical cancer prevention and were more likely to have reported having had a pap smear within the past year than women who did not receive the program” (Dignan, Michielutte, Blinson, Wells, Case, Sharp, Davis, Konen, & McQuellon, 1996).

One possible reason for the success of the National Cancer Institute’s Cherokee health education campaign may be the fact that the educational program was administered by Cherokee health educators (Dignan, et. al., 1996). Minority health educators are essential to the continued success of health promotion programs. In order to change health behavior, health educators must first connect with the people they aim to help, as community involvement is the key to both the formation and the sustainability of a program. Health educators routinely work side by side with members of the community they serve, in order to determine how to best meet their specific needs (Green & Kreuter, 2005). One way to foster a connection between health educators and any given community is to enable members of the community to become health educators.

Increasing the diversity of the health education workforce will enrich patient education by providing varying points of view from health educators of diverse cultural and ethnic backgrounds. The Institute of Medicine found that “culturally appropriate patient education programs offer promise as an effective means of improving patient participation in clinical decision making and care-seeking skills, knowledge and self advocacy” (Smedley, Stith, & Nelson, 2002).

The diversification of the public health field could potentially improve the health of every minority population in the country, including the health of Flint, Michigan. The Genesee County Health Department (2005) reports that African Americans suffer from heart disease, stroke, and diabetes at higher rates than White county residents. These disparities are especially evident in the city of Flint, in which over half of all residents are African American. Increasing the numbers of African American health educators in the city of Flint could have an important and dramatic effect on the health of the city.

U of M Flint offers both a Bachelor of Science and Master of Science in Health Education (BSHE and MSHE, respectively). Unfortunately, these programs matriculate low numbers of URM students. The overall student body at U of M Flint consists of 14% URM; however, the percentage of URM students graduating with a degree in Health Education has been below 14% for 4 of the past 6 years. The MSHE program has seen significantly lower numbers of URM graduates than the BSHE program, and these numbers do not appear to be increasing (NCES, 2006).

Existing Programs

Clearly, there is a need to recruit more minority students into BSHE and MSHE programs. It has been noted that high school counselors and teachers often do not do enough to encourage minority students to attend college or enter the medical field (Bessent, 1997, Lewin & Rice, 1994). The Institute of Medicine calls for “campaigns to attract youngsters in the health professions” to increase minority enrollment in these programs (Lewin & Rice, 1994). Information is readily available on many successful programs for recruiting high school students into college level health programs (Bessent, 1997, Lewin & Rice, 1994, Etowa, Foster, Vukic, Wittstock, & Youden, 2005) ; however, these programs do not focus on health education. Possibly due to the relative youth of the field, recruitment programs are not designed specifically to increase minority health educators.

Some Health Careers Opportunity Programs, such as the Flint HCOP, include health education as one of the many health careers they discuss with young people. There are over 80 HCOP programs nationwide. While specific services differ from program to program, all HCOP initiatives share the same goal of increasing workforce diversity by motivating and enabling young people to enter the health professions. The Flint HCOP provides economically disadvantaged students from local middle and high schools with after-school tutoring and Health Professions Clubs, where students learn about the various health careers, visit local healthcare facilities, and speak to health professionals such as Emergency Medical Technicians and dietitians. Remedial instruction in English, science, math, and computers are provided for students in the Saturday Morning Academy (for eleventh and twelfth grade students), Junior Summer Science and Math Program (for middle school students), and the Pre-Health Professions

Program (for recent high school graduates). These programs are offered on the University of Michigan Flint campus, and some of the instructors are current faculty.

Other programs across the U.S. have been successful in recruiting minority students to medical and nursing schools. Harvard Medical School's Minority Faculty Development Program was designed to increase the number of minority applicants to Harvard Medical School. This program provides necessary funding and faculty advisors to minority students, and has allowed hundreds of students to work on research projects with Harvard biomedical researchers (Lewin & Rice, 1994).

The Socialization to Success in Nursing (SOS) Program at Howard University in Washington DC uses several strategies to increase recruitment and retention of minorities to the nursing program. SOS offers Future Nurses Clubs in four local high schools, providing interested students with the opportunity to learn about the profession, meet practicing nurses, and visit a local hospital. A Saturday Nursing Academy is offered for twelfth grade students who intend to apply to nursing schools. SOS also offers a summer immersion program for high school graduates who are entering the nursing program at Howard University. These students stay on campus for five weeks, receive a mentor, and participate in activities to help them become acclimated to academic life. Once a student is successfully enrolled in the nursing program, he or she is able to take advantage of the counseling services, tutoring, and scholarships offered by the SOS program (Howard University, 2003).

In her book *Strategies for Recruitment, Retention, and Graduation of Minority Nurses in Colleges of Nursing*, Hattie Bessent (1997) summarizes what she believes are the most effective strategies for recruiting minority students to nursing programs. According to Bessent, a recruiter should work as part of a university-wide effort to recruit minority students. Letting the students

know that they will be supported by the university as a whole will make the program seem more appealing. Recruiters should help students understand the requirements of both the nursing program and the university, and provide them with resources for their questions about financial aid and other issues. Bessent also points out that when conducting a presentation, a recruiter should be aware of different learning styles of students, as well as their ethnic, financial, educational and professional backgrounds. Because students want to know if the program is right for them, successful recruitment programs feature recruiters who represent the ethnicity of the targeted population and understand their culture (Bessent 1997).

Social Marketing and Social Cognitive Theories

Social Marketing theory is a method of motivating behavior change using the concepts of commercial marketing, notably the four P's of product, price, placement, and promotion. The theory has been successfully applied to the field of public health for more than 30 years (Smith, 2006). It is a theory which, according to Smith (2006), "typically targets complex, often socially controversial behaviors, with delayed and distant benefits to audiences who often do not recognize they have a problem, much less are looking for a solution." The issue of the shortage of URM health educators fits this description, as some of the workshop participants will not be aware of the field of health education or the shortage of URM in the health professions.

Program planners have successfully applied Social Marketing Theory to the design of recruitment programs. The Enhancing Alzheimer's Caregiver Health project, a national Alzheimer's caregivers study recruited ethnic and racial minorities using a social marketing approach that included two extra P's, Participants and Partners. In this social marketing campaign, program planners found that the social marketing theory provided a "framework to

map out the steps in recruitment that will be needed and to plan for allocations of time, staff, and resources” (Nichols, Martindale-Adams, Burns, Coon, Ory, Mahoney, Tarlow, Burgio, Gallagher-Thompson, Guy, Arguelles, & Winter, 2004).

In a study examining the social marketing theory and African American audiences, Chandra and Paul (2003) found that a social marketing approach can be successful in recruiting African Americans to clinical trials. The authors suggest including African American staff, especially community leaders and professionals (such as physicians), and presenting the message to the audience in a culturally sensitive manner. The campaign should emphasize how the target behavior benefits the African American community as a whole, and how not engaging in the target behavior could negatively affect the community.

The Social Cognitive Theory is similar to Social Marketing Theory because it takes an individual’s environment into consideration as a major determinant of behavioral change. According to SCT, an individual’s own capabilities are equally as important as his or her environment when it comes to determining behavior. Some of the important personal factors are “the individual’s capabilities to symbolize behavior, to anticipate the outcomes of behavior...[and] to have confidence in performing a behavior or self-regulate behavior” (Baranowski, Perry, & Parcel, 2004). In other words, the target audience will be more likely to engage in a certain behavior if they can imagine what the behavior will be like, as well as the probable outcome and how it will affect them; this is called outcome expectancies. Also, people are more likely to try something new if they believe they are able to perform the new behavior; this is called behavioral capability (Baranowski, Perry, & Parcel, 2004).

Among the important social factors in SCT are observational learning and modeling. These constructs are contingent on the theory that people learn about different behaviors from

the people around them. People can learn how to perform a new behavior correctly, what the possible consequences are, and whether it is socially acceptable or not, all from simply observing others. In SCT, one way to increase the probability of behavior change is to model the target behavior by exposing the audience to others who are engaging in the target behavior. This is especially effective when the audience sees the modeled behavior result in a positive outcome (Baranowski, Perry, & Parcel, 2004). The utilization of these theories will be discussed in methods section of this applied project.

Chapter III Methods

Based on the relevant literature and the needs of the workshop, a social marketing approach was utilized in designing the health education workshop. A social marketing approach takes sequential pro-active steps to influence audience behavior by informing people of benefits and reducing the barriers which prevent the target audience from performing the desired behavior. A key concept of the theory is the belief that people change primarily because they receive some sort of valued benefit, not simply as a result of new information. Thus, the workshop focuses on the potential benefits of becoming a health educator for the target audience as both individuals and as a community (Maibach, Rothschild, & Novelli, 2002, Smith, 2006).

Barriers must also be addressed, as well as alternate behaviors available to the audience which may compete with the adoption of the target behavior. Maibach, Rothschild, & Novelli (2002) point out that barriers are equally important to benefits in the social marketing process. Barriers can be psychological, social, or physical, such as economic or environmental concerns. Reducing barriers increases the likelihood that an audience will adopt the target behavior; the

lower the price, the more likely one is to buy the product. The workshop reinforces the various support systems in place at U of M which reduce barriers to academic success, including financial aid, no-cost tutoring, and small class sizes. The workshop also focuses on concrete actions and the steps the audience can do to achieve a goal; as “people want to know what to do, not what to think” (Smith, 2006).

Social marketing campaigns have four main components: price, product, promotion and place. All four components are essential in successfully marketing a behavior or idea to a target group (Maibach & Parrott, 1995). For the Health Education Workshop, the price is time and money spent in college pursuing a degree in Health Education. The product in this case is a career in Health Education. The promotion used in the workshop is a combination of direct marketing and face to face communication to encourage the target audience to engage in the target behavior of pursuing a career in Health Education. As the place, or channel of the message, the workshop uses spoken lecture, and written information. All of this information was delivered in an educational setting, a classroom at the University of Michigan Flint, by a health education student and professor in the program.

The health education workshop is also based on components of the Social Cognitive Theory, including the determinants of behavior. The workshop incorporates a current or former health education student who is a URM to talk about his or her experiences as a student and/or health educator. This allows the students to vicariously experience possible outcomes, as well as receive social persuasion from someone of their ethnic group. Behavioral capability, or the belief that one is able to successfully complete a given behavior or goal, is one of the most important aspects of the SCT, and one of the best predictors of behavioral change (Baranowski, Perry, & Parcel, 2004). The workshop attempts to raise the students’ behavioral capability by

providing the students with a first-hand account of a health education student or alumnus who is also a URM as well as information on the sequential steps they must take to become a health educator, including information on the educational requirements.

The workshop is designed to be implemented in a single session lasting from 90-105 minutes. The workshop is designed for implementation to groups of eleventh, and/or twelfth grade students. The group size may range from 10 to 30 students. The session should be implemented by two leaders; preferably, at least one of the session leaders should be URM.

The workshop uses a Powerpoint presentation as the main method of communication. Students are also be given information on the U of M Flint health education program to take out with them. Besides covering the topics described in the objectives below, the workshop incorporates a hands-on role-play activity to stimulate discussion about cultural competence and diversity in health education. The workshop leaders initiate a discussion of the role play activity afterwards, as the activity is designed to bring up issues of stereotyping in the practice of medicine. This segues into the topic of the importance of maintaining a diverse health education workforce.

Workshop leaders also show the students samples of health education in the news or media. This includes print or television ads and news articles which can then be discussed as a group, tying in any topics which may be relevant to the samples, including readability/literacy, cultural perspective, scientific research, law change/policy, etc. The workshop leaders reinforce the immediacy, importance, and relevance of health education.

The students are given an anonymous, 10 question written survey at both the beginning and conclusion of the workshop. The surveys are included as appendices B and C. The surveys

are designed to measure the objectives below and will also provide the students with the opportunity to provide open-ended feedback.

Objectives

1. Students will learn about what a health educator does and the range of positions health educators hold.
2. Workshop participants will understand the requirements of a health education degree and the difference between the Bachelor and Master programs at the University of Michigan Flint.
3. Students will become familiar with the employment outlook and income projections for health educators.
4. The students will learn about the shortage of URM healthcare workers and the effects this has on the health of ethnic minorities, and the benefits of diversifying the health education workforce.
5. Workshop participants will learn about the ways they can give back to their community as a health educator by providing culturally competent health education to individuals with similar cultural, ethnic, linguistic, and socioeconomic backgrounds.

Chapter IV Results

Workshop Implementation

The workshop was implemented on Saturday, November 18, 2006 at the University of Michigan Flint for the Flint Health Careers Opportunity Program (FHCOP) Saturday Morning Academy (SMA). Nine 11th grade SMA students took part in the workshop; all were students of

Flint Community Schools. The workshop lasted 1 hour and 30 minutes and was implemented by the student investigator - an MSHE student at U of M Flint, and Dr. Shan Parker, a professor in the Department of Health Sciences and Administration at U of M Flint.

Before the workshop, current statistics on the employment outlook for health educators were collected from the Michigan Department of Labor and Economic Growth and the U.S. Department of Labor. These statistics were included in the Powerpoint presentation. The Department of Health Sciences and Administration was also contacted for information about the Bachelor of Science in Health Education (BSHE) program, which was included in a hand-out for the students to take home. The handout outlined the BSHE program, listed the required classes and provided contact information for the Department of Health Sciences and Administration, inviting students to call to set up an appointment with an advisor to discuss the program. Information about the BSHE and Master of Science in Health Education (MSHE) programs was incorporated into the Powerpoint presentation.

Prior to the workshop, several departments within the University were contacted to gather promotional giveaways to hand out to students as incentives. The department of Admissions, Project EXPORT, and the Urban Health and Wellness Center contributed giveaways for the students.

The workshop was presented with a Powerpoint slide show designed to address the five workshop objectives. To educate the students about the role of health educators, we discussed a recent news item concerning public health and looked at examples of health education in the media. The health education news item discussed with the students was the recent recall of spinach due to E. Coli contamination. I lead the students in a discussion about the role health educators may have played in the process of identifying the source of the outbreak of E. Coli,

recalling the affected spinach, and notifying the public. For the discussion on health communication, the students watched a TV ad from the “truth.org” anti-smoking campaign and engaged in a discussion regarding its effectiveness in motivating behavior change. As an example of the materials designed by health educators to help individuals manage their own health, each student received a Calorie and Carbohydrate calculator, donated by the Urban Health and Wellness Center.

The workshop raised students knowledge and awareness about the lack of diversity in the health professions. Students were presented with statistics regarding the shortage of URM in the health professions, and engaged in a discussion regarding the ramifications of this shortage and how diversifying the health education workforce can help the community. To reinforce the consequences of an ethnically homogenous workforce, students participated in a role play, in which participants were able to role play the part of health educators and patients dealing with stereotyping. A description of the role play is appended.

Results of the Evaluation

The objectives of the workshop were measured using self-reporting in written pre and post surveys (see Appendices B and C). The survey was conducted under human subjects approval granted to the Flint HCOP by the U of M Flint Institutional Review Board.

The pre and post surveys were identical with the exception of the first question, which read “before today, I had heard of the field of health education” on the pre survey and “I am familiar with the field of health education” on the post survey. The surveys were anonymous, and students were instructed not to write their names or any other identifier. The surveys were implemented as part of the workshop and were analyzed using the Statistical Package for the

Social Sciences. The pre and post test results have a Cronbach’s alpha reliability rating of .888 and .825, respectively. The results are included in Table 1. All nine participants completed both the pre and post surveys. Participant demographics were gathered by the Flint HCOP, and are outlined in Figures 1 and 2.

Figure 1: Workshop Participants by gender, November 18, 2006.

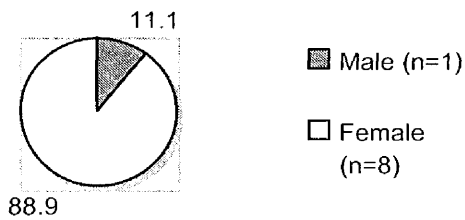


Figure 2: Workshop Participants by ethnicity, November 18, 2006.

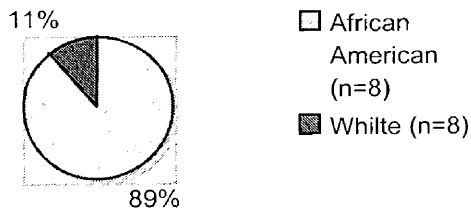


Table 1 : Survey Results, health education workshop, November 18, 2006

N=9		Strongly Agree % (n)	Agree % (n)	Disagree % (n)	Strongly Disagree % (n)	Don't Know % (n)
Before today, I had heard of the field of health education.	Pre only	55.6 (5)	22.2 (2)	11.1 (1)	0	11.1 (1)
I am familiar with the field of health education.	Post only	55.6 (5)	44.4 (4)	0	0	0
I am considering studying health education in college.	Pre	44.4 (4)	11.1 (1)	11.1 (1)	0	33.3 (3)
	Post	33.3 (3)	66.7 (6)	0	0	0
	change	-11.1 (1)	55.6 (5)	-11.1 (1)	0	-33.3 (3)
I know what a health educator does.	Pre	0	55.6 (5)	11.1 (1)	0	33.3 (3)
	Post	66.7 (6)	33.3 (3)	0	0	0
	change	66.7 (6)	-22.3 (2)	-11.1 (1)	0	-33.3 (3)
I know where I can get a degree in health education.	Pre	11.1 (1)	66.7 (6)	11.1 (1)	0	11.1 (1)
	Post	33.3 (3)	66.7 (6)	0	0	0
	change	22.2 (2)	0	-11.1 (1)	0	-11.1 (1)
I am familiar with the requirements for a degree in health education.	Pre	0	55.6 (5)	11.1 (1)	0	33.3 (3)
	Post	55.6 (5)	44.4 (4)	0	0	0
	change	55.6 (5)	-11.1 (1)	-11.1 (1)	0	-33.3 (3)
I am familiar with the job availability for health educators.	Pre	11.1 (1)	44.4 (4)	22.2 (2)	0	22.2 (2)
	Post	55.6 (5)	44.4 (4)	0	0	0
	change	44.5 (4)	0	-22.2 (2)	0	-22.2 (2)
I am familiar with the pay that an average health educator makes.	Pre	11.1 (1)	33.3 (3)	22.2 (2)	0	33.3 (3)
	Post	33.3 (3)	44.4 (4)	0	0	22.2 (2)
	change	22.2 (2)	11.1 (1)	-22.2 (2)	0	-11.1 (1)
There is a shortage of minority health professionals in the U.S.	Pre	77.8 (7)	0	0	0	22.2 (2)
	Post	66.7 (6)	33.3 (3)	0	0	0
	change	-11.1 (1)	33.3 (3)	0	0	-22.2 (2)
It is important to diversify the health professional workforce.	Pre	66.7 (6)	22.2 (2)	0	0	11.1 (1)
	Post	77.8 (7)	22.2 (2)	0	0	0
	change	11.1 (1)	0	0	0	-11.1 (1)
Becoming a health educator is a good way to help the community.	Pre	66.7 (6)	22.2 (2)	0	0	11.1 (1)
	Post	77.8 (7)	22.2 (2)	0	0	0
	change	11.1 (1)	0	0	0	-11.1 (1)

The primary objective of the workshop was for students to learn about what a health educator does. The survey results indicate that this objective was met, with 100% of students reporting knowing what a health educator does at post test, compared to 55.6% at pre test. The

second objective of the workshop was to familiarize students with the health education degree programs at the University of Michigan Flint. At post test, 100% of students reported knowing the requirements of a degree in health education and knowing where they can receive such a degree. In addition, 100% of students either agreed or strongly agreed that they are considering pursuing a degree in health education.

The third objective of the workshop was to educate participants about the employment outlook and income projections for health educators. Again, the survey results indicate that this objective was met. The percentage of students reporting familiarity with the income and job expectancies rose from 44.4% to 77.7%, and 55.5% to 100%, respectively.

The fourth objective of the workshop focuses on increasing the participants' awareness of the shortage of URM health professionals and the benefits of diversifying the healthcare workforce. The students' awareness of the shortage of minority health professionals increased from pre to post test, with 100% of students agreeing that there is a shortage of minority health professionals in the U.S. at post test, compared to 77.8% at pre test. The percentage of students who felt it is important to diversify the health professional workforce also increased, from 88.9% to 100%.

The fifth objective of the workshop was to help students' understand the way health educators can contribute to their community by providing culturally competent health education. The survey results that this objective was met; more students agreed that health education is a good way to help the community at post test than at pre test (100% versus 88.9%).

Chapter V: Discussion and Conclusion

This workshop is based on the Social Marketing and Social Cognitive theories, including weighing benefits and barriers, behavioral capability, social persuasion, and modeling. The four P's of the Social Marketing Theory were addressed, as all are equally important in marketing a given behavior to a target audience (Maibach & Parrott, 1995). The place, or channel, was a PowerPoint presentation delivered by a current health education student and a health education professional. These presenters were selected based on their ability to provide social modeling and represent individuals of different ethnicities with different experiences in health education. The product of the workshop is the field of health education. The promotion used in the workshop was a combination of Social Marketing and Social Cognitive strategies. The price discussed in the workshop is the time and effort spent perusing a degree in health education.

The workshop is designed to encourage participant involvement throughout the presentation, including discussions of current events in public health, health communication campaigns, and other examples of health education in daily life, and a role play. The first topic of discussion was the subject of health communication campaigns. Students had several examples of campaigns they had seen at home or at school, and were able to discuss the appeal and effectiveness of these campaigns. The students seemed to understand health communication strategies such as attention getting devices. Throughout the workshop, the students asked questions about the topics and appeared engaged and interested.

The students were eager to participate in the role play and take on the roles of health educator and patient. They brought humor and energy to the activity, but also clearly understood the role of a health educator to teach a patient and provide appropriate advice. After the role play, a debriefing raised several points about what the purpose of the activity could be. One

student pointed out that the role play reinforced the importance of a health educator knowing his or her patient, because it is important for health educators to know their target audience so that their advice can be practical and usable. The students also clearly understood that the way a certain message is delivered is contingent upon certain traits of the audience.

The discussions about the health communication campaigns and the role play were designed to raise the students' behavioral capability regarding health education. Behavioral capability, the belief that one can successfully complete a certain behavior, is an important predictor of behavioral change according to the Social Cognitive Theory (Baranowski, Perry, & Parcel, 2004). The students were able to discuss and experience the various steps that health educators take to deliver a message to their audience. These activities were intended to demonstrate to the students their own capability to engage in health education.

Role playing is commonly used in health education to help participants experience a point of view outside of their own. The role play included in the workshop encouraged the students to think about the possible consequences of stereotyping in a health education setting. This activity was successful in stimulating a discussion on stereotyping and labeling. The students were responsive and interested in the topic, and through this discussion, I was able to reinforce the importance of diversifying the workforce. The students seemed to have some awareness of health disparities between whites and minorities in the U.S., and the workshop provided an opportunity for them to learn more about health disparities nationally and in Flint, the lack of ethnic diversity in the health professions, and the shortage of health professionals in Flint.

The final part of the workshop was about the career requirements of health education. The students asked several questions about the Bachelor of Science in Health Education (BSHE)

program at U of M Flint, the pay rate and educational background of a typical health educator, and types of work required of a health educator. Many of the questions were answered by Dr. Parker, who shared experiences of her own as well as those of colleagues and students. The presentation included a discussion of the requirements of the BSHE program and students were given a handout with detailed information about required classes. Providing students with this information raised their behavioral capability by informing of them of the steps required to complete a degree in health education.

A key concept of the Social Marketing Theory is that individuals change their behavior only after weighing the benefits and barriers (Smith, 2006). This workshop discusses both benefits and barriers to entering the field of health education. The students learned about the benefit to the community of diversifying the health workforce and of improving public health through prevention. The students also learned about the benefits and barriers of the large range of positions health educators hold and the range of salaries typical health educators make.

The workshop also incorporated social persuasion and modeling, important determinants of behavior according to the Social Cognitive Theory (Baranowski, Perry, & Parcel, 2004). Participants were able to vicariously experience possible outcomes of entering the field of health education by speaking with the presenters, multi-ethnic individuals of different ages at different stages in their educational and professional careers. The students benefited from the presence of Dr. Parker, both as an expert on the Health Education programs at U of M Flint, and as an established professional in the field of health education, and myself, a current U of M Flint health education student.

After the workshop, students were invited to stay and ask additional questions, and they were given our contact information. All students were given a fact sheet on the BSHE program

requirements and classes, information for setting up an appointment with an advisor in the Department of Health Sciences and Administration, and promotional give-aways provided by the U of M Flint office of Admissions, Project EXPORT, and the Urban Health and Wellness Center.

Strengths

This workshop is easily adaptable to any health careers opportunity program or similar health careers education program. It can also be used as recruitment tool for health education programs at post-secondary institutions. The program can be updated to include current topics relevant to the audience, and information pertaining to any college level health education program.

This workshop fulfills a need for the marketing of health education as a career choice. The literature review did not produce examples of programs similar to this one which focus solely on health education as an educational track and career field. This workshop is designed specifically to raise awareness of the field and to recruit diverse populations into the health education workforce.

Limitations

Because this program is implemented as one time, 1-2 hour workshop, it provides no follow-up of participants. Rather, it designed as a point of entry for post-secondary health education programs to make contact with potential students. There is currently no way to track long-term change in workshop participants, although a long-term follow up evaluation could be designed and included with future implementations of the program.

This workshop was implemented as part of Saturday Morning Academy, a program in which students learn about different health careers. The outcome of the workshop may have been affected by material the students were exposed to in other sessions of the Academy. Effects could be better measured if it were delivered at the beginning of Saturday Morning Academy rather than in the middle.

This program is designed to be presented to students with a pre-existing interest in college and/or health careers, including ethnic minority students. Therefore, implementation of the workshop requires access to such a group.

Recommendations

This workshop uses health education theory to promote the field to URM students. The Social Cognitive and Social Marketing theories can be applied to the recruitment of diverse individuals into the health professions. It is recommended that health educators take active steps in recruiting diverse students into the field of health education by implementing workshops like this one in both urban and rural areas throughout the U.S.

Conclusion

The large body of research regarding health disparities, cultural competence, and workforce diversity strongly suggests a need for the aggressive recruitment of a more diverse health workforce if this nation is to achieve equal healthcare for all citizens. The field of health education is in a position to significantly contribute to the elimination of health disparities, the promotion of cultural competence, and the diversification of the health workforce. However, in order to best make a contribution in these areas, there needs to be an operationalization of the

need for diversity in the form of increased recruitment of ethnic minorities into the field of health education.

The workshop plays a role in this effort, as a tool for raising awareness about the field of health education and actively recruiting minority students into college-level health education programs. The workshop uses methods of social marketing and the social cognitive theory to motivate students to pursue a degree in health education by educating participants about the positive affects health educators have on the community, at both an individual and societal level.

References

- Agho, Augustine. (2005). Flint Health Opportunity Program. (Health Resources and Services Administration Grant Number 1386006309A1). Flint, MI: University of Michigan Flint.
- Allegrante, John P., Moon, Robert W., Auld, Elaine, & Gebbie, Kristine M. (2001). Continuing-Education Needs of the Currently Employed Public Health Education Workforce. *American Journal of Public Health*, 91 (8), 1230.
- Ayanian, J.Z., Udvarhelyi, I.S., Gatsonis, C.A., Pashos, C.L., & Epstein, A.M. (1993). Racial Differences in the Use of Revascularization Procedures After Coronary Angiography. *Journal of the American Medical Association*. 269, 2642-2646.
- Baranowski, Tom, Perry, Cheryl L., & Parcel, Guy S. (2004). How Individuals, Environments, and Health Behavior Interact. In Glanz, Karen, Rimer, Barbara K., & Lewis, Frances Marcus (Eds.). *Health Behavior and Health Education*. 165-184. San Francisco: Jossey-Bass.
- Barrera, Issaura; Corso, Robert M. (2002). Cultural Competency as Skilled Dialogue. *Early Childhood Special Education*, 22 (2), 103-113.
- Bessent, Hattie, (1997). Exemplary Strategies for the Recruitment, Retention, and Graduation of Minorities in Nursing. In Bessent, Hattie, ed. (1997). *Strategies for Recruitment, Retention, and Graduation of Minority Nurses in Colleges of Nursing*. Washington, D.C.: American Nurses Publishing.
- Blind to Bias? (2003). *Hospitals and Health Network*, 77 (8), 36-8.
- Carlisle, D.M., Leake, B.D., & Shapiro, M.F. (1995). Racial and Ethnic Differences in the use of Invasive Cardiac Procedures Among Cardiac Patients in Los Angeles County, 1996 through 1998. *American Journal of Public Health*, 85, 352-356.
- Chandra, Ashish, & Paul, David P., III. (2003). African American Participation in Clinical Trials: Recruitment Difficulties and Potential Remedies. *Hospital Topics*. 81 (2), 33-8.
- Cohen, Jordan J., Gabriel, Barbara A., & Terrell, Charles. (2002). The Case for Diversity in the Health Care Workforce. *Health Affairs*, 21 (5), 90.
- Dignan, Mark, Michielutte, Robert, Blinson, Karen, Wells, H. Bradley, Case, L. Douglas, Sharp, Penny, Davis, Stephen, Konen, Joseph, & McQuellon, Richard P. (1996). Effectiveness of Health Education to Increase Screening for Cervical Cancer Among Eastern-Band Cherokee Indian Women in North Carolina. *Journal of the National Cancer Institute*, 88 (22), 1670 -1676.

- Eshleman, Jane; Davidhizar, Ruth E. (2006). Strategies for Developing Cultural Competency in an RN-BSN Program. *Journal of Transcultural Nursing*, 17:2. 179-183.
- Etowa, Josephine B., Foster, Suzanne, Vukic, Adele, R., Wittstock, Lucille, & Youden, Susan. (2005). Recruitment and Retention of Minority Students: Diversity in Nursing Education. *International Journal of Nursing Education Scholarship*. 2 (1).
- Gándara, Patricia. (2001). Lost Opportunities: the Difficult Journey to Higher Education for Underrepresented Minority Students. In Institute of Medicine (2001). *The Right Thing to Do, The Smart Thing to Do: Enhancing Diversity in Health Professions*. Washington, D.C.: National Academy Press.
- Genesee County Health Department (GCHD). (2005). *The Health of Genesee County*. Flint: author.
- Green, Lawrence W., & Kreuter, Marshall W. (2005). *Health Promotion Planning: An Educational and Environmental Approach*. California: Mayfield Publishing Co.
- Grumbach, Kevin, Coffman, Janet, Rosenoff, Emily, & Muñoz, Claudia. (2001). Trends in Underrepresented Minority Participation in Health Professions Schools. In Institute of Medicine (2001). *The Right Thing to Do, The Smart Thing to Do: Enhancing Diversity in Health Professions*. Washington, D.C.: National Academy Press.
- Health Resources Services Administration (HRSA). (2006). Health Careers Opportunity Program. Retrieved July 17, 2006 from <http://bhpr.hrsa.gov/diversity/hcop/>.
- Institute of Medicine. (2001). *Crossing the Quality Chasm*. Washington, DC: The National Academy Press.
- Johnson, Jerry C., & Smith, Nancy H. (2002). Health and Social Issues Associated with Racial, Ethnic, and Cultural Disparities. *Generations Journal*, 25 (3).
- Kilment, Alexander, & Turner, Mark. (2006). Health and Education top UN Envoys' Priorities List. *Financial Times*, June 20, 2006. Retrieved August 14 2004 from LexisNexis Academic.
- Kington, Raynard, Tisnado, Diana, & Carlisle, David. (2001). Increasing Racial and Ethnic Diversity among Physicians: An Intervention to Address Health Disparities? In Institute of Medicine (2001). *The Right Thing to Do, The Smart Thing to Do: Enhancing Diversity in Health Professions*. Washington, D.C.: National Academy Press.
- Kim, Timothy F. (2002). Do Physicians Bear Some Blame for Health Disparities? *Family Practice News*, 66:11.

- Komaromy, M., Grumbach, K., Drake, M., Vranizan, K., Lurie, N., Keane, D., & Bindman, A.B. (1996). The role of Black and Hispanic Physicians in Providing Health Care for Underserved Populations. *New England Journal of Medicine*. 334, 1305-1310.
- Lewin, Marion Ein, & Rice, Barbar, eds. (1994). *Balancing the Scales of Opportunity: Ensuring Racial and Ethnic Diversity in the Health Professions*. Washington, D.C.: National Academy Press.
- Maibach, E., & Parrott, R. L. (1995). *Designing Health Messages: Approaches from Communication Theory and Public Health Practice*. Thousand Oaks: Sage Publications.
- Maibach, E., Rothschild, Michael L., & Novelli, William D. (2002). Social Marketing. In Glanz, Karen, Rimer, Barbara K., & Lewis, Frances Marcus (Eds.). *Health Behavior and Health Education*. 437-461. San Fransico: Jossey-Bass.
- Majumdar, Basanti, Browne, Gina, Roberts, Jacqueline, & Carpio, Barbara. (2004). Effects of Cultural Sensitivity Training on Health Care Provider Attitudes and Patient Outcomes. *Journal of Nursing Scholarship*, 36:2, 161-166.
- Michigan Department of Labor and Economic Growth Bureau of Labor Market Information and Strategic Initiatives. (2002) Occupational Employment Forecasts, 2002 – 2012. Retrieved July 17, 2006 from <http://www.michlmi.org/index.jsp>
- Mitchell, Dennis A. (2005). Commitment to Achieving a Diverse Oral Health Care Workforce. *American Journal of Public Health*, 95 (8). 1308.
- National Center for Health Statistics (NCHS). (2002). *Health, United States, 2002 With Chartbook on Trends in the Health of America*.
- Neimeyer, Greg. (2004). Professional Development; Cultural Training Increases Competence of Nonminority Psychologists. *Health & Medicine Week*, Jan. 19. 589.
- Nettles, Michael T., & Millett, Catherine M. (2001). Toward Diverse Student Representation and Higher Achievement in Higher Levels of the Amerian Educational Meritocracy. In Institiute of Medicine (2001). *The Right Thing to Do, The Smart Thing to Do: Enhancing Diversity in Health Professions*. Washington, D.C.: National Academy Press.
- Nichols L, Martindale-Adams J, Burns R, Coon D, Ory M, Mahoney D, Tarlow B, Burgio L, Gallagher-Thompson D, Guy D, Arguelles T, & Winter L. (2004). Social Marketing as a Framework for Recruitment: Illustrations from the REACH Study. *Journal of Aging and Health*, 16 (5), 157-76.
- Nursing Program Proves No Shortage of Interest in Nursing. (2003). Capstone Online. 25:4. Accessed online July 6, 2006 at <http://www.usnationaljazzmuseum.org/newsevents/Capstone/2003/OctoberII/feature127.htm>.

- Saha, S., Komaromy, M., Koepsell, T.D., & Bindman, A.B.. (1999). Patient-physician Racial Concordance and the Perceived Quality and Use of Health Care. *Archives of Internal Medicine*; 159, 997-1004.
- Schim, Stephanie Myers, Doorenbos, Ardith Z., & Borse, Nagest N. (2005). Cultural Competence Among Ontario and Michigan Healthcare Providers. *Journal of Nursing Scholarship*, 37 (4), 354-361
- Smedley, Brian D., Stith, Adrienne Y., & Nelson, Alan R., eds. (2002). *Unequal Treatment: Confronting Racial and Ethnic Disparities in Health Care*. Washington DC: The National Academy Press.
- Smith, WA. (2006). Social Marketing: an Overview of Approach and Effects. *Journal of the International Society for Child and Adolescent Injury Prevention*. 12 (1), 38-43.
- Society for Public Health Education (SOPHE). (2005). National Health Education Planning Guide. Accessed June 8, 2006 at www.sophe.org.
- Sullivan Commission on Diversity in the Health Workforce. (2003). *Missing Persons: Minorities in the Health Professions*.
- Tobacco Use: Study Finds Health Education Helps African American Light Smokers Kick the Habit. (2006). *Law & Health Weekly*. Retrieved August 14, 2006 from Lexis Nexus Academic database.
- United States Department of Education, Center for Education Statistics (NCES). (2006). *Integrated Postsecondary Education Data System Completion Report*.
- United States Department of Health and Human Services. (2000). *Healthy People 2010*. 2nd Ed. With Understanding and Improving Health and Objectives for Improving Health. 2 vols. Washington, DC: U.S. Government Printing Office.
- United States Department of Health and Human Services. (2002). *The Registered Nurse Population: Findings From the National Sample Survey of Registered Nurses*. Retrieved April 15, 2006 from <http://bhpr.hrsa.gov/healthworkforce/reports/rnsurvey/rnssl.htm>
- United States Department of Health and Human Services. (2006). *Vital and Health Statistics. Summary Health Statistics for the U.S. Population: Interview Survey, 2004*. (DHHS Publication No. 2006-1557). Hyattsville, MD: Author.
- United States Department of Labor. (2006). *Household Data Annual Averages*. Retrieved May 30, 2006 from <http://bls.gov/cps/cpsaat11.pdf>

Appendix A

Roll Play Set Up

Materials

4 index cards, clearly labeled as follows:

- I Can't Read
- My Husband Makes My Decisions for Me
- I Don't Really Understand What You Are Saying
- I Won't Follow Your Instructions

Health Education Workshop PowerPoint Presentation
Masking tape or painter's tape

Roll Play Procedure

Explain to the class that you'd like to get everyone and involved in a role play about health educators and their patients. Ask for volunteers. You'll need from 4-6 young men and women. Pick one volunteer to be the first patient. Without showing the volunteers the words printed on the cards, tape the index cards on the forehead of the patient. Designate another volunteer the health educator.

Instruct the volunteers to enact a clinical situation in which the health educator is giving information to the patient about the topic displayed on the PowerPoint slides. Topics include smoking, nutrition, and safe sex. Encourage your volunteers to elaborate on the slides, get dramatic, and have fun! Afterwards, ask the patient "what does your card say?"

Repeat this scenario with the other patient index cards and patient scenario slides at your discretion.

Debriefing

Afterwards, it is important to point out the purpose of the activity with the class. You may ask the student what they thought the lessons learned from this activity are.

Some important points (these are included on the slides):

- People form stereotypes before getting to know someone.
- Health employees form stereotypes too. Even educated people have misconceptions and prejudices.
- People may have stereotypes without even knowing it.
- Some good ways to fight unfair stereotyping is to make people aware of it and to diversify the workforce.

Appendix B

Health Education Workshop Pre-Survey

This survey is anonymous. Do not write your name.

How much do you agree with the following statements? Please circle ONE answer.

	<u>Strongly Disagree</u>	<u>Disagree</u>	<u>Don't Know</u>	<u>Agree</u>	<u>Strongly Agree</u>
1. Before today, I had heard of the field of health education.	1	2	3	4	5
2. I am considering studying health education in college.	1	2	3	4	5
3. I know what a health educator does.	1	2	3	4	5
4. I know where I can get a degree in health education.	1	2	3	4	5
5. I am familiar with the requirements of a degree in health education.	1	2	3	4	5
6. I am familiar with the job availability for health educators.	1	2	3	4	5
7. I am familiar with the pay that an average health educator makes.	1	2	3	4	5
8. There is a shortage of minority health professionals in the U.S.	1	2	3	4	5
9. It is important to diversify the health professional workforce.	1	2	3	4	5
10. Becoming a health educator is a good way to help the community.	1	2	3	4	5

Appendix C

Health Education Workshop Post-Survey

This survey is anonymous. Do not write your name.

How much do you agree with the following statements? Please circle ONE answer.

	<u>Strongly Disagree</u>	<u>Disagree</u>	<u>Don't Know</u>	<u>Agree</u>	<u>Strongly Agree</u>
1. I am familiar with the field of health education.	1	2	3	4	5
2. I am considering studying health education in college.	1	2	3	4	5
3. I know what a health educator does.	1	2	3	4	5
4. I know where I can get a degree in health education.	1	2	3	4	5
5. I am familiar with the requirements of a degree in health education.	1	2	3	4	5
6. I am familiar with the job availability for health educators.	1	2	3	4	5
7. I am familiar with the pay that an average health educator makes.	1	2	3	4	5
8. There is a shortage of minority health professionals in the U.S.	1	2	3	4	5
9. It is important to diversify the health professional workforce.	1	2	3	4	5
10. Becoming a health educator is a good way to help the community.	1	2	3	4	5

Please write any comments below.

Thank you!